Building Permit Checklist
IB 110 - Part C (Revised December 20, 2013)
City Planning & Development – Development Services
City of Kansas City, Missouri

Please utilize the following checklist of items necessary for performing a complete plans review of the project. Omission of required information will result in delays in the plan review approval process. The Checklist is for reference only, and does not constitute a complete list of all items that may be required for approval during the plans review process prior to permit issuance. The owner and the owner's design professionals are responsible for compliance with the requirements of the Code of Ordinances of Kansas City, Missouri.

Required information on plans:

City Planning - Development Services - Plans Review Division

1.**General:**

a. Code Modification Requests (CMR) and Design Appeals: If design is based on an approved CMR or decision of the Building and Fire Code Board of Appeals, list those approvals.
b. Preliminary Code Review Design Meeting, Team Inspection correspondence and/or any other related prior correspondence with CPD-DS. Include a copy of the approved correspondence regarding any Preliminary Code Review Design Meetings and/or Team Inspections applicable to this project.
c. Show on the plans the adopted model codes and standards (e.g. building, plumbing, mechanical, electrical, fire protection, etc.), including edition, to which the project has been designed (see above listing of adopted codes and standards).
d. Provide a note on the plans certifying conformance of plans to the provisions of the 2012 International Energy Conservation Code (IECC) as amended by KCBRC.
e. For residential occupancies, indicate on the plans whether the property will be lot split, platted or otherwise constructed for separate ownership creating property lines between proposed dwelling units. Note: If property lines are proposed between townhouse dwelling units within a building, the provisions of the International Residential Code, 2012 Edition, are applicable and the occupancy group shall be noted as such on the submitted plans.
f. Deferred submittals (See Information Bulletin No. 144 – Deferred Plans Review Submittals):
   [ ] Truss design package
   [ ] Metal building design package
   [ ] Precast concrete design package
   [ ] Fire suppression system design package
   [ ] Fire alarm system design package
   [ ] State of Missouri certification of modular building design
   [ ] Other: _____, please include a copy of prior approval of any other deferred submittal items.
g. Provide a listing on the plans all materials regulated as constituting a physical or health hazard, hazardous production material, detonation hazard, deflagration hazard or a hazard from accelerated burning, and/or materials that readily support combustion in excess of those found in IBC Tables 307.1(1) and 307.1(2).
h. Please indicate whether the proposed work constitutes a change in use and/or occupancy of the existing building per building code definitions.

2.Architectural:

a. Occupancy Group: Show actual floor area for each occupancy group.
b. Type of Construction: Show type of construction classification for each building. Show design reference numbers of fire-resistive assemblies.
c. Location on Property: Indicate width of public space, streets or yards on sides of building for use as a basis for allowable area increase.
d. Floor Area: Show actual gross floor area (not including basement). Show actual floor area of largest story (do not include basement).
e. Height and Number of Stories: Show actual height and number of stories.
f. Occupant Load: Show occupant load for each floor. Provide layout for all fixed seating.
g. Fire Walls: If used, show location and fire-resistance rating. Include design reference numbers.

h. Penetrations of Rated Assemblies: Show method of opening protection and note reference listing.
i. Sprinklers: State whether building is to be sprinklered throughout. If basement only is sprinklered, so state.
j. Exiting: Show exiting system including rated enclosures, stairways, exit widths, etc.
k. Accessibility: Show means for providing accessibility for persons with disabilities in compliance with IBC Chapter 11.

3.**Site Plan** (see also CPD-DS Land Development Division)**:**

a. Legal description of the property.
b. Drawn to scale, Scale shall be not less than 1:60, North arrow indicated on plan.
c. Location and dimensions of all property lines.
d. Indicate all earth retaining structures (retaining walls, etc.)
e. Existing and proposed grade elevation contours of the land.
f. Show all sidewalks, driveways, paved areas, streets, curbs and gutters.
g. Show all existing and proposed fire hydrants and siamese connections.
h. Show dimensions of buildings and distances to other buildings, improvements, property lines, driveways, and proposed parking.
i. Identify site utilities and storm drainage, indicate routing of all utilities to the point of connection to public facilities.
j. Note on plans boundaries of 100-year Regulatory Floodplain and Floodway.
k. Location of the public right-of-ways adjacent to the property.
l. Location of all easements on the property.
m. Layout and design of the parking areas, including spaces for the disabled, required screening, off-street loading/unloading areas (including maneuvering area) and pavement construction details.
n. Parking area lighting.
o. Landscaping plan complying with the requirements of the BZA or CPC, if applicable.
p. Show erosion and sedimentation control measures

4.Structural: Structural calculations shall be furnished for all new buildings and existing buildings when structural modifications are proposed except buildings of three stories or less of conventional light-frame construction complying with Sections 1804.1, 1805.4.2, 2301.2.3, 2304, and 2308 of the International Building Code, or when waived by the CPD-DS Director. The following information is required:

a. Design Load: List design load combination (IBC Sec. 1605.1).
b. Snow loads (IBC Sec. 1608): (1) Show basis for design Pf. (2) Include drifted snow and rain-on-snow surcharge. (3) Considerations for roof slopes <1/2:/ft. (IBC Sec. 1608.2).
c. Live loads (IBC table 1607.1): List design floor live loads for each use category. State live-load reductions, if any, and show basis (IBC Sec. 1605.3.1.1).
d. Seismic Zone and Earthquake regulations (IBC Sections 1613):
State site conditions and coefficients used.
e. Design wind loads (IBC Section 1609): State design wind pressure used. Show basis of design wind pressure for primary frames and systems (IBC Sec. 1609 or ASCE Section 6).
(1)State importance Factor I (IBC 1604.5).
f. Foundations:
(1) Show that all footings meet or exceed minimum depth of 36 inches.
(2) Provide geotechnical soils report when an assumed design soil bearing capacity of greater than 2000 PSF for undisturbed grounds is utilized in the design of the foundation systems.
(3) State in geotechnical soils report, as applicable, or in calculations applicable design soil parameters (i.e., vertical and lateral bearing, sliding, etc.).
(4) State basis for design values used (i.e., assumed for stated soil classification, recommended in soils investigation report, etc.).
g. Materials & Fasteners: Provided materials specifications including UBC material designations (or other approved designation such as ASTM, etc.). Note allowable design stresses.

5.**Special Inspections** in accordance with Section 1704 of the International Building Code:

a. List of applicable types of work which require Special Inspection per KCBRC Section 18-22, IBC Section 1704 and Chapter Two of the CPD-DS Special Inspections Manual:

[ ] Placement of Reinforced Concrete	[ ] Erection of Precast Concrete
[ ] Testing of Reinforced Concrete	[ ] Structural Welding
[ ] Placement Reinforcing Steel	[ ] High Strength Bolting
[ ] Prestressing Concrete	[ ] Steel Frame Inspection
[ ] Bolts installed in Concrete	[ ] Inspection of Structural Steel Fabricator
[ ] Verification of Soils	[ ] Inspection of Metal Building Fabricator
[ ] Excavation and Filling	[ ] Sprayed Fire Resistant Materials
[ ] Drilled Piers or Piles	[ ] Structural Masonry
[ ] Earth Retaining Structure	[ ] EIFS Insulation/Finish System
[ ] Detention Basin	[ ] Smoke Control System
[ ] Inspection of Precast Fabricator	[ ] Seismic Resistance
[ ] Other_____	

b. Submit a letter from the Special Inspection Agency accepting responsibility for each applicable item.
c. List approved fabricators (if any) for specific types of work.
d. For smoke control systems, submit system documentation including the design requirements (IBC 909.2), rational analysis (IBC 909.4), and acceptance testing procedures and methods (IBC 909.3, 909.18).
e. Where Quality Assurance for Seismic Resistance is required, submit the quality assurance plan and the contractor statement of responsibility (IBC 1705).

See CPD-DS Special Inspections Manual for complete information. A Preconstruction Meeting is required prior to permit issuance for all Special Inspection projects.

6.**Mechanical**

a. HVAC Equipment Specifications: Show locations, type, capacity and weight/support of all heating, ventilation and air conditioning equipment.
b. Rated Enclosures: Show or specify wall construction where rated enclosures are required (heaters, boilers, etc., over 400,000 BTU; air conditioners over 100 HP, etc.).
c. Special Equipment: Show special equipment such as kitchen hoods, enclosed garage ventilation, paint booth exhaust, automatic fire suppression, etc.
d. Special Requirements: Show appurtenances and required details such as flue vent type and size, expansion tanks, blow down systems, protection devices, means for combustion air and special use equipment.
e. Venting System: Show all duct runs, fire dampers where applicable, gauge thickness for medium and high velocity systems, type and class of non-metallic duct, etc.
f. Materials: Specify materials of installation components.
g. Fire or Smoke Control: Define in specifications or on plans special use of equipment in conjunction with fire or smoke control. Submit system documentation including the design requirements (IBC 909.2), rational analysis (IBC 909.4), and acceptance testing procedures and methods (IBC 909.3, 909.18).
h. Penetrations of Rated Assemblies: Show method of opening protection and note referenced listing or refer to drawings containing same information.

7.**Plumbing:**

a. Plumbing Fixtures: Show fixture numbers and locations and provide basis for number of fixtures. Include water closets, urinals, lavatories and drinking fountains.
b. Building Drain System: Show the under-floor system of the drain waste and soil piping, specifying pipe sizes and slope. Provide riser diagram for multiple fixtures.
c. Building Utilities: Show the sanitary building sewer, storm sewer system, water service, gas service and all connections to the public utilities.
d. Materials: Specify all piping materials.
e. Penetrations of Rated Assemblies: Show method of opening protection and note referenced listing or refer to drawings containing same information.
f. Water System: Provide known water pressure and supply pipe sizes and calculations of water system, water heater data, and hot water system.
g. Venting System: Show pipe sizes, size of vent through the roof and connection to building drains.
h. Trap Arms: Specify trap arm size and specify lengths.

i. Special Requirements: Show all required appurtenances, such as grease interceptors, sump pumps, sewage ejectors, sample ports, backflow preventers, backwater valves, and special fixtures.
j. Gas Piping System Pressure: Specify the gas piping system operating pressure.

8.**Electrical:**

a. Riser Specifications: Show riser and note equipment amps, wire size and grounding.
b. Current: Show in calculations the available fault current.
c. Voltage: Note service voltage.
d. Show service equipment short circuit amp rating.
e. Provide panel schedules with circuit amp rating.
f. Provide plan showing equipment and circuits. Specify wire as copper or aluminum and insulation type.
g. Penetrations of Rated Assemblies: Show method of opening protection and note referenced listing or refer to drawings containing same information.
h. Grounding: Show grounding electrode conductor system, including conductor size(s).

9.**Automatic Sprinkler System and Alternative Fire Suppression Systems:**

a. System Layout: Provide plan showing sprinkler system layout and major components.
b. Calculations: Provide system calculations if system is hydraulically designed. Plans showing conformance to standard pipe schedule will not require calculations.
c. Materials: List material specifications.
d. Provide on plans:
(1) All items required for working plans in the applicable NFPA document.
(2) All information to be included on the hydraulic design information sign as required by the applicable NFPA document.
e. Sprinkler System Supervision: Specify type of supervision provided for systems as required by IBC Section 903.4.
f. Alternative Fire Suppression Systems:
(1) Provide UL listing.
(2) Provide copy of "system plate" showing schematic layout of system.

10.**Elevator:**

a. Hoistway: Show hoistway construction and access.
b. Hoistway Ventilation: Show hoistway venting and any equipment, ducts, or wiring located in hoistway.
c. Machine Room: Show machine room construction and access.
d. Machine Room Lighting and Ventilation: Show machine room lighting and ventilation.
e. High-rise Requirements: Show details related to high-rise requirements.
f. Pit Construction: Show pit construction details.
g. Emergency Operation: Provide information on emergency operations.
h. Alternate Materials and Methods: If design utilizes approved alternate materials and methods of construction, list those engineered alternates on the plans.

11.**Floodplain** (applications for floodplain development permit may be filed separately or with applications for permit)**:**

a. A letter of request for Floodplain Development Permit, describing the site involved.
b. Three (3) sets of site plans, scale shall be not less than 1:60, based on the City's Datum Plane (722.57' NAVD = 0' KCD) and showing the following:
(1) Existing and proposed contours (including flood boundaries).
(2) All existing and proposed contours of the site (including floodplain and floodway boundaries).
(3) Elevations: (A) Regulatory flood level-NAVD
(B) Regulatory flood level-KCD
(C) Lowest floor elevation-KCD
(4) The legal description of the property, location and dimensions of all property lines.
(5) The City benchmark in the area (contact City Surveyor at 923-2058 or view online at http://www.kcmo.org/pubworks.nsf/web/engsurvey?opendocument).
(6) Verification that all utilities and mechanical equipment will be protected from flood damage by elevation or flood-proofing means.
(7) Completed Floodplain Development Permit Application Form (available in CPD-DS Information Bulletin Number 120). http://www.kcmo.org/codes/IBS/IB120.pdf
c. Calculations substantiating that there is no calculable increase in the flood level in the occurrence of a regulatory flood when construction is within the regulatory floodway.

d. Evidence that permits required by Section 404 of the Clean Water Act or other necessary permits have been obtained from the United States Corps of Engineers.
e. Storm water runoff calculations, prepared in accordance with APWA 5600 as adopted by the Department of Public Works.
f. Name and address of the property owner.
g. Note on plans boundaries of 100-year Regulatory Floodplain and Floodway.

12.**Zoning:**

a. Description of the proposed use of the property.
b. Reference to any Board of Zoning Adjustment (BZA), City Plan Commission (CPC), Special Review District, Landmarks Commission, Building and Fire Codes Board of Appeals (BFCBA) or other cases related to the project (including requests for zoning variances,special use permit, major site plan review,subdivision plat or lot split approval, rezoning, etc.). Indicate that the conditions of any related cases have been satisfied in this application.
c. Zoning district classification.
d. Elevation views of the building above ground level.
e. Verification of the elevation of the Airport Height Zone limits in relation to the height of the building. Airport Height Zones are established surrounding Kansas City International Airport, Kansas City Downtown Airport and Richard-Gebaur Airport.
f. Indication of the approval of any encroachment of the project into the public right-of-way.

13.**Fire Alarm System:**

a. Show the standard(s) and edition of the standard(s) utilized in design of the fire alarm system.
b. Show the specifications for the fire alarm system materials and equipment.
c. Indicate if the fire alarm system is required by the Building Code.
d. Show the location and spacing of alarm-initiating devices such as smoke detectors, heat detectors, radiant energy-sensing fire detectors, manual fire alarm boxes, etc.
e. Show the location of audible and visual notification appliances for the fire alarm system.
f. Show the location of fire alarm control panel within the building.
g. Indicate the nominal production sensitivity (percent per foot obscuration), as required by the listing, for smoke detectors.
h. Indicate the temperature of operation for fixed-temperature, rate-compensated or spot-pattern type heat detectors.
i. Show that fire alarm system shall be provided with two independent and reliable power supplies, one primary (main) and one secondary (standby), each with adequate capacity to accommodate the system's demand.
j. Show that fire alarm electrical wiring and equipment installed in ducts, HVAC plenums, or space used for environmental air-handling purpose shall be listed for the intended application.
k. Provide fire stop assembly design number (UL or other approved assembly) and complete construction details for fire alarm system equipment penetration of fire-resistive assemblies.
l. Indicate the type of fire alarm system, i.e., protected premises, supervising station, etc. for review of the method of supervision of the system.
m. Indicate if the fire alarm system is part of a combination system to initiate elevator recall for fire fighters' service and/or elevator shutdown.
n. Indicate if the fire alarm system interfaces with the HVAC systems and is to cause the operation of smoke/fire dampers; fan control for mechanical smoke-control systems for atria, stair/elevator hoistway pressurization, or smoke-removal system for high-piled combustible storage occupancies; smoke/fire doors or activates the HVAC system for the purpose of smoke control, as applicable.
o. Indicate if the fire alarm system is listed for releasing service to provide automatic or manual actuation of fire suppression systems, as applicable.
p. Provide descriptive information as to the fire alarm system's performance criteria including a list of the sequence of events started upon activation of the system's alarm-initiating devices.

Development Services - Land Development Division

14.Site Disturbance Plan Components:

	a.	Disturbed area equal to or in excess of one acre. **No** - Site Disturbance Permit is NOT required. Erosion/siltation control is required. **Yes** - Site Disturbance Permit is required. See item c. - NOTE below.
	b.	Proposed drainage improvements discharge to a lake or pond. **Yes** - Developer must post performance bond for Land Disturbance Permit. Bond not required at time of plan review.

NOTE:	c.	If disturbed area is equal to or greater than one acre, a Site Disturbance Permit is required from the City and Missouri Department of Natural Resources (MDNR). Application for City permit shall be made via Information Bulletin No. 159 Public Infrastructure Plan Submittal Checklist. After City compliance of Site Disturbance Plans is met, CPD-DS-LDD will issue a letter to the design professional which must be included with the MDNR NPDES permit application. Send NPDES Land Disturbance Permit requests to: MDNR Attn: Sonny Wellesley Water Pollution Control Program 500 Colbern Road Lee's Summit, Missouri 64086 Phone: 816-622-7026 Fax: 816-622-7044
	d.	Disposition of existing site trees.

Title Sheet	
a.	Total disturbed area
b.	Project benchmark
c.	Section-Range-Township
d.	City, County, State
e.	Legal description, labeled "Legal Description" or Property Description"
f.	Sheet index
g.	Full name of Land Disturbance plans including other coincidental activities
Sheet 2	
h.	General notes
i.	KCMO Ordinance No. 981135 notes
j.	Construction schedule
k.	Excerpt of soil survey from County soils records
l.	Soils legend
Sheet 3	
m.	Existing and proposed contours
n.	Seed and mulch notes
o.	Show and identify Property Lines and label as "Property Line"
p.	BMP construction details
q.	Storm sewer plans for permanent detention facilities used temporarily for siltation control
r.	Earthwork quantities (public/private)
Sheet 4/5/6	
s.	Phased erosion control measures
t.	Inlet protection measures
u.	Explanation of work to be performed in each phase of Land Disturbance activities
v.	Vehicle tracking control location and detail
w.	No more than ¼ acre of disturbed area per 100 LF of silt fence
x.	Material stockpile locations and erosion control measures
Sheet 7	
y.	Riser pipe/sediment basin detail
z.	Check dam detail
aa	Silt trap detail
bb	Temporary diversion dike detail
cc	Diversion ditch details
dd	Inlet protection details
Miscellaneous	
ee	Offsite grading easements
ff	Private grading permit application

a.	Does the project meet the definition of a "development" under APWA section 5601.2 and 5601.3?
b.	If **"Yes"**, a storm drainage study sealed by a Missouri-registered professional engineer is required, consisting, at a minimum, of a letter addressing stormwater runoff management from the project and may recommend stormwater detention/retention and/or downstream drainage improvements in accordance with APWA and adopted KCMO supplements. A macro drainage must be prepared for phased projects in accordance with the Stormwater Management Plan document. Refer to "Policies" on the City webpage.
c.	Is project located in a regulatory floodplain?

d.	If **"Yes"**, a Floodplain Study must be provided for processing through CPD-DS-PMB.
e.	If **"Yes"**, address the following comment: Substantial improvements for this project do not address the detrimental impact to the Health and Safety issues that exist upon such property. Under the Nuisance law "Chapter 28 of Code of Ordinances of KCMO i.e. Sections 28-4(b), 28-4(e), 28-5(2)..." and "FEMA 44CFR i.e. sections 60.3(4)(II), 60.22(b)(2), 60.22(c)(1), 60.22(c)(7), 60.23(h)(1), 60.23(h)(6)…" you must address the above issue before the Floodplain Development Permit is issued, even though the damage would be self inflicted.

For projects proposing limited miscellaneous work in the public right-of-way that are not required to have separate public improvement plans review permit applications, the following information shall be provided on the plans.

Type of Construction	Specification	Units	No. of Units
Concrete Sidewalk	4" x ____' wide	LF	
Concrete Curb/Curb & Gutter	type _____	LF	
Concrete Drive Approach	_____" thick	SY	
Storm Sewer Connection		EA	
Sanitary Sewer Connection		EA	
Asphaltic Concrete Pavement	_____" thick	SY	

Development Services – Land Development Division – Arterial Street Impact Fee Administrator

15.**General:**

a. Description of proposed uses of the building, including the floor area for all nonresidential uses and any other information necessary to calculate the required impact fee.
b. Reference to any previously approved credits.
c. Reference to any previously approved individual assessment.

Planning Services – Development Management Division

16.**General:**

a. Site plans indicating conditions of approval in approved development plans.
b. Landscaping plans complying with approved development plans and applicable codes and ordinances.
c. Reference to City Plan Commission case number.

Planning Services – Planning, Preservation and Urban Design Division – Historic Preservation Branch –

17.**General:**

a. Site plans indicating conditions of Landmarks Commission approval.
b. Exterior elevations and/or building cross-sections indicating conditions of Landmarks Commission approval.
c. Reference to Landmarks Commission case number.

Planning Services – Planning, Preservation and Urban Design Division – Special Review District Branch –

18.**General:**

a. Site plans indicating conditions of Main Street Special Review District Committee approval.
b. Landscaping plans complying with approved plans.
c. Reference to City Plan Commission case number, if applicable.

Department of Aviation

19.**General:**

a. Site plan conforming to the lease agreement for projects located on Aviation Department property and the elevation of building or structure in relation to the Airport Height Zone elevation.
b. Determination of no hazard to air navigation as issued by the Federal Aviation Administration for those projects that exceed the airport height zone limits.
c. Height of building or structure above ground level (AGL) and above mean sea level (AMSL) for those project that exceed the airport height zone limits.

Department of Fire

20. **General:**

a. Fire Department access roads. Note: Access roads must be capable of supporting Fire Department vehicles weighing in excess of 85,000 pounds and must provide such access to within 150 feet of all portions of the building exterior. Fire department access roads are to be a minimum of 20 feet wide unobstructed with an overhead height restriction not less than 13 feet 6 inches. Turning radiuses will be evaluated. Gates which cross a fire department access road shall have an approved means of operating (opening) the gate, electric gates will require the installation of a siren sensor switch installed on the gate.

b. Location of fire hydrants and siamese connections at building. Note: Fire hydrants shall be located within 400 feet travel distance of all portions of the building. Fire Department Connections (FDC) shall be of the 2 ½" type and be accessible from a driving surface (fire access road) capable of supporting the weight of Fire Department vehicles. Per NFPA 291, private fire hydrants visible from a public right-of-way shall be painted solid red. Private fire hydrants on private access roads that are not visible from the public way may be painted any other color than that of a public fire hydrants, which presently is international orange and black.

c. Standpipe and hose cabinet locations within the building. Occupant use fire hose is strongly discouraged, due to the hazards involved, maintenance and training requirements.

d. Location of central control station. Rooms containing fire protection systems (fire alarm, fire sprinkler control valves, fire command centers, etc.) shall be identified in the plans and physically on the building as required by Code.

e. Key boxes are only required for secured R-2, high rises or other areas as required by the Authority Having Jurisdiction (AHJ). Other occupancy types may obtain a key box for their structure if they so desire. An order form must be obtained from the Fire Prevention Division to ensure the lock is properly keyed to the City of Kansas City, Missouri.

f. A separate Fire Department permit is required for the installation/modification/removal of any flammable/combustible liquid tank located within the City Limits. Plans and permit application is required to be submitted separately and directly to the Fire Prevention Division

Department of Health – Air Quality Program

21. **General:**

a. **The Air Quality Control Program is notified of the plans submittal by CPD-DS and Air Quality Program approval, as applicable, is required prior to issuance of building permits. The following information is required in the application for Air Quality Permits (see below) filed with the Air Quality Program office and is not required in the building permit plans:** a complete description and process flow diagram of the proposed construction/modification; the composition and maximum design rate of material throughput; control device information; any additional information needed to establish emission rates.

Department of Health – Food Protection Program

22 **General:**

If the scope of the project includes construction, conversion or renovation of a food establishment, including restaurants, bars or taverns and institutions (schools, hospitals), remodeling of existing kitchens and other uses involving food preparation for public consumption, including grocery stores, cafeterias and convenience stores. Please submit a completed Plan Review Audit Form with the application. A copy of the form can be obtained at the following link on the Health Department's website. This is for plan review of the construction documents only any permits from the Health Department shall be obtained directly from the Health Department.

http://www.kcmo.org/idc/groups/health/documents/health/008427.pdf

Department of Health – Environmental Health Program

23.**General:**

Childcare Facilities:

a. Floor plans showing layout of rooms, restrooms, diapering stations, hand sinks, food preparation sinks, drinking fountains, kitchen equipment (stoves, refrigerators, three compartment skins, hand sinks). All lavatories must be equipped with hot (100-120°F) and cold running water under pressure, soap dispensers and sanitary hand drying device (mechanical, paper towels, etc.).

b. Indicating that floor coverings shall be constructed of smooth durable materials such as concrete, terrazzo, ceramic tile, durable grade linoleum, quarry tile, or tight wood impregnated with plastic.

c. Indicating permanently fixed lighting

d. Indicating rest room walls must be full floor to ceiling, doors solid unvented, and the room have mechanical ventilation.

e. Indicating hand sink within 8 feet of diaper station (without going through a door).

Water Recreational Facilities:

a. Complete plans of construction of the water recreational facility (swimming pool, spa, etc.), indicating materials used for interior lining.
b. Indicating enclosures at least 4 feet high (wall or fence) with no more that 4 inch opening between slats of a slatted fence, door or gates are self-closing and self-latching.
c. Indicating rest rooms with adequate lighting and ventilation, toilets, hand sinks and showers (showers are exempt for hotels and motels).
d. Indicating walkways at least 8 feet wide for outdoor pools and 4 feet wide for indoor pools, and at least 10 feet between pools and or spas.
e. Indicating pool/spa depths and demotions including square footage and capacity in gallons of water, pool water inlets, skimmers, anti-entrapment pool main drain, at least 2 means of egress (one at each end), a device for fastening lifeline across pool if the water level is over 5 feet deep and under water lights are on a ground fault circuit interrupter breaker.
f. Indicating pool equipment enclosed and protected from the elements with adequate lighting and mechanical ventilation to remove toxic fumes and vapors.
g. Indicating pump that will provide proper turn over rate (6 hours for pools, 2 hours for wading pools, 30 minutes for spas), filter, chemical feeder for sanitizer, heater (optional), flow meter, and plumbing to skimmers, inlets, and main drain.

Department of Human Relations – Section 3 Office

24.**General:**

Plans are not routed to the Section 3 Office for review, however, the applicant is advised to contact this office for information related to planned or potential HUD sourced City funding (including CDBG, HOPWA, ESG, HOME) of the project and the City's Section 3 Program. Certification of this Checklist by the owner's Design Professional in Responsible Charge indicates acknowledgement to the City that the owner understands these Section 3 Program obligations apply to the project's entire duration if HUD sourced funding is sought from the City at any point during the construction project.

Department of Parks & Recreation –

25.**General:**

a. Site plans showing property lines and boulevard or parkway right-of-way.
b. Dimensioned setbacks of proposed structures from property lines.
c. Existing and proposed drive approaches, reference the appropriate standard.
d. Existing and proposed storm drainage inlets.
e. Demolition areas.
f. Existing and proposed street trees.
g. Existing and proposed signage.

Department of Public Works – Street and Traffic Division

26.**General:**

a. Location of drive approaches on public streets and driveway geometrics.
b. Identification of Public Works Standards for public improvements.

Department of Water Services – Water Meter Connections

27.**General:**

a. Location and size of existing public water main.
b. **Tap/Tee location and size**-The tap/tee **connection** must be opposite the building served, and be perpendicular to the public water main from the main to the curb box or, in the absence of a curb box, to the property line. See section 4.02 of the Rules and Regulations of the Water Services Department. **Important Note:** Any service over 1" will require a tee, two solid sleeves and three gate valves provided by the Contractor. See section 4.04 of the Rules and Regulations of the Water Services Department.
c. **Service line type and size**-Service line size will be determined by the hydraulic needs of the building to be served. The Fire Marshal's office will determine the size of a fire protection line. Plans must be clear as to the intended use of a water service, that is, whether it is a domestic service, fire protection, or a combination service (domestic teeing off the fire protection). Combination Service lines are not recommended. If a combination service line is proposed, a registered Professional Engineer licensed in the State of Missouri must certify that the water in the service line will be turned over (refreshed) every two days. See section 3.06 of the Rules and Regulations of the Water Services Department.

d. **Location of controlling valve**-A large service (over 1") will be installed by cutting in a tee (minimum 4") using t two solid sleeves and three key operated gate valves that is to be furnished by the Contractor, and will be installed immediately after the solid sleeve (installed by the Contractor). A small service (1" and less) will have a ball type valve (curb stop) that will be located perpendicular to the water main and in the public right-of -way one foot inside of the curb, normally in a grassy area. When a combination service is proposed, a controlling valve will be located immediately after the tee off the fire protection service for the domestic line. The domestic tee off the fire protection will be done entirely on private property.

e. **Location of commercial water meter**-On commercial buildings a meter will be located outside in a pit or vault, depending upon the size of the meter. See Section 5.03 and 5.05 of the Rules and Regulations of the Water Services Department. A domestic meter can be located inside the building under special circumstances by approval of the Water Services Department only. See section 5.04 of the Rules and Regulations of the Water Services Department.

f. **Type of water meter**-If a domestic service is a single tap off the public water main, or is teed off a fire protection service with no private fire hydrants then a meter will be installed on the domestic service line and a double detector check backflow preventer shall be installed on the fire protection service line.
The meter size shall be based on the expected actual demand calculated according to the fixture value method as described in the most recent edition of the AWWA M22 manual or the International Plumbing Code. Detailed meter sizing calculations shall be included for any proposed water meter 2" or larger. Meter sizing calculations shall be stamped by a registered professional engineer licensed in the State of Missouri and must be submitted with plans. Meter sizing calculations sheet must be listed in the index indicating the page number they appear on. Under no circumstance will the meter size be greater than the service line size.
A **full flow fire meter** will be required on a combination line that has private fire hydrants (see c.). The full flow fire meter will be subject to the following criteria to determine location:
(1) will be located on the fire protection service before domestic tee,
(2) will be located on private property, and
(3) will be easily accessible by a water service truck (exact location of the meter can be coordinated with a Water Services Department field inspector).
Small Meters – All ¾" and 1" meter sets shall include an unmeasured flow reducer attached to the meter yoke. See section 5.04 of the Rules and Regulations of the Water Services Department.

g. **Location of stop valve**-A stop valve is required on all domestic services immediately upon entering the building, just before the RPZ backflow preventor. **The inlet valve of the RPZ can serve for a stop valve.**

h. **Type and location of backflow preventor (BFP)-**The Water Services Department requires backflow prevention for containment, thus protecting the public water supply from contamination. A reduced pressure zone (RPZ) backflow preventer is required on all high hazard service lines which includes any commercial domestic water service. The RPZ will be located just inside the building, after the stop valve (see g. above), before any branch service lines or, if outside, in a heated enclosure such as a "hot box.". If an RPZ is located inside it must be within twenty (20) feet of a floor drain, unobstructed. A double check backflow preventor will be required on any low hazard service such as a lawn irrigation (using no chemical injections). A double detector check backflow assembly shall be installed on all fire protection service lines that are tapped off the public water main.

i. Service lines for all fire protection/sprinkler systems shall be designed to properly maintain adequate pressures and flows in the system at all times. See section 2.06. Applicant must submit a separate letter with the following statement signed and sealed by a Professional Engineer, registered with the Missouri Board for Professional Architects, Engineers and Land Surveyors. See section 3.03 (N) of the Water Services Rules and Regulations for the form that shall be signed by the responsible design professional and submitted with the project designed documents for permit application.

Statement:
The water flow test data shown above are the values determined by testing on the date and time indicated. Due to the daily and seasonal fluctuations inherent in the KCMO water supply, the flow and pressure available at other times may be less. All users of this data are responsible to apply an adjustment to the water flow test data where appropriate or as required by NFPA 13 and any other applicable codes, standards, ordinances or engineering practice. This form shall be signed by the responsible design professional and submitted with the project design documents for permit application.

KCMO Project # Project Name & Address

_____

_____

Name: _____
MO P.E. License # _____ _____
Signature: _____

j. Legal description of the property.

k. Site plan showing the location of the building.

Department of Water Services – Industrial Waste Division

28.**General:**

a. Site plan showing routing and size of the private sanitary sewer including location and capacity of outdoor grease interceptor, when required or existing; location of sampling manhole, when required; and all connections to the public sanitary sewer. Grease interceptor sizing calculations required on plan. Reference to City Planning & Development, project number for building shell, when applicable

b. Plumbing plan will identify & locate all fixtures and show routing of wastewater discharge from said fixtures, including dishwashers, floor drains and floor sinks; fixture labeling will be consistent with riser diagram. Grease interceptor sizing calculations required on plan. Existing grease interceptors require current certificate of pumping/cleaning and satisfactory inspection

c. Mechanical plans showing pretreatment equipment, if required.